



# United States Department of the Interior



## BUREAU OF LAND MANAGEMENT

Yuma Field Office  
2555 East Gila Ridge Road  
Yuma, AZ 85365  
[www.az.blm.gov](http://www.az.blm.gov)

### **Decision Record for Jester's Hiking Trail Environmental Assessment AZ-320-2005-002**

#### **Decision**

My decision is to adopt the proposed action, as described and analyzed in the Environmental Assessment and Finding of No Significant Impact. The proposed action involves the installation of soil erosion control structures and benches along the 2.3 mile hiking trail, and re-routing the final 150 vertical feet of the trail an additional 600 feet in order to improve public safety. Various small recreational structures would also be installed at the trailhead. The project area is located in sections 17 and 20, Township 9 South, Range 20 West, Gila and Salt River Base Meridian, Yuma County, Arizona.

#### **Rationale for Decision**

The environmental assessment compares the impacts to the project area's resources from the proposed action to the impacts of these same resources if no management action is taken, or the no action alternative. The environmental assessment concluded that implementing the proposed action would cause short term negative impacts to air quality, vegetation, wildlife, and soils; and would cause long term beneficial impacts to vegetation, recreation, and soils. The environmental assessment also concluded that there would be no long term negative impacts to any of the project area's affected resources from implementing the proposed action. The proposed action does not significantly affect energy supply, distribution, and/or use and therefore a Statement of Adverse Energy Impact is not required.

The proposed action is in conformance with the Yuma District Resource Management Plan (RMP) and its Record of Decision, as amended (February 1987). Even though hiking trails are not specifically provided for in the RMP, the project is clearly consistent with the Land Use Plan decision that the "BLM's principle objective would be to ensure that adequate recreation opportunities are provided for a broad range of recreating publics" (Yuma District RMP, page 21). The YFO does not currently maintain any other mountain hiking trails. Implementation of the proposed action would, therefore, increase the range of recreational opportunities within the jurisdiction of the YFO.

#### **Stipulations**

1. All equipment and tools would be washed prior to implementation with a high pressure water hose to decrease the risk of inadvertently spreading non-native invasive species into the project area.
2. No elephant trees (*Bursera microphylla*) would be wholly removed as a part of any proposed action in the environmental assessment.

3. Damage to cryptobiotic soils within the project area would be kept to a minimum. Workers would be taught how to identify cryptobiotic soils before entering the project area.
4. No historic properties would be disturbed as a part of the proposed action. All workers would be briefed on cultural resource laws and regulations before entering the project area and would be required to follow cultural resource stipulations. Should any cultural and/or paleontological resources be encountered during project ground-disturbing activities, work would cease in the area of the discovery and the BLM would be notified immediately. Work may not resume until written authorization to proceed is issued by the BLM.
5. Any Native American religious concerns shared with BLM during the consultation process would be addressed pursuant to applicable laws and regulations prior to project implementation.

#### **Management and Mitigation Considerations**

- The installation of soil erosion control structures would decrease the current rates of soil erosion occurring from existing visitor use on the trail.
- Damage to cryptobiotic soils, cultural and paleontological resources, and historical properties from implementation of the proposed action would be minimized by briefing all workers on stipulated best management practices prior to project implementation.
- Interpretive signs, such as *Leave No Trace* and *Tread Lightly!* materials, would provide visitors with guidelines for responsibly recreating on our public lands. These materials would educate visitors on how to easily reduce or avoid adverse impacts to the sensitive natural resources within the project area.
- Maintained trails serve to keep hikers on course and prevent disturbance in new areas.

#### **Monitoring**

Monitoring of the project will be performed by BLM employees and volunteers, with assistance from Yuma Trails, Inc. Yuma Trails is an Arizona non-profit corporation that has partnered with the Yuma Field Office to preserve and promote community recreational trails for the use, enjoyment, and education of the general public in the greater Yuma area. Soils and vegetation on and adjacent to the trail will be monitored to ensure that increased damage to these resources is not occurring. Visitor use numbers will also be monitored with a pedestrian traffic counter.

The Proposed Action will have no effect on the President's Energy Policy and a Statement of Adverse Energy Impact is not required.

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Rebecca Heick  
Field Manager  
Yuma Field Office

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Date



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### **FINDING OF NO SIGNIFICANT IMPACT For Jester's Hiking Trail Environmental Assessment AZ-320-2005-002**

The Bureau of Land Management Yuma Field Office has analyzed a proposal for improvement and maintenance actions at Jester's Trail and trailhead in the Gila Mountains. Soil erosion control structures and benches would be installed along the 2.3 mile hiking trail, and the final 150 vertical feet of the trail would be re-routed an additional 600 feet in order to improve public safety. Various small recreational structures would also be installed at the trailhead. The project area is located in sections 17 and 20, Township 9 South, Range 20 West, Gila and Salt River Base Meridian, Yuma County, Arizona.

The proposed action is in conformance with the Yuma District Resource Management Plan (RMP) and its Record of Decision, as amended (February 1987). Even though hiking trails are not specifically provided for in the RMP, the project is clearly consistent with the Land Use Plan decision that the "BLM's principle objective would be to ensure that adequate recreation opportunities are provided for a broad range of recreating publics" (Yuma District RMP, page 21). The YFO does not currently maintain any other mountain hiking trails. Implementation of the proposed action would, therefore, increase the range of recreational opportunities within the jurisdiction of the YFO.

The environmental assessment compares the impacts to the project area's resources from the proposed action to the impacts of these same resources if no management action is taken, or the no action alternative. The environmental assessment concluded that implementing the proposed action would cause short term negative impacts to air quality, vegetation, wildlife, and soils; and would cause long term beneficial impacts to vegetation, recreation, and soils. The environmental assessment also concluded that there would be no long term negative impacts to any of the project area's affected resources from implementing the proposed action. The proposed action does not significantly affect energy supply, distribution, and/or use and therefore a Statement of Adverse Energy Impact is not required.

On the basis of the information contained in the environmental assessment, and all other information available to me as is summarized above, it is my determination that the proposed action does not constitute a major Federal Action affecting the quality of the human environment. Therefore, an Environmental Impact Statement is unnecessary and will not be prepared.

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Rebecca Heick  
Field Manager  
Yuma Field Office

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Date



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## ENVIRONMENTAL ASSESSMENT (EA) FORM

AZ-320-2005-002

PROJECT NAME: Jester's Hiking Trail

TECHNICAL REVIEW:

(X)	Program	Reviewer	Signature	Date
X	Air Quality	R. Oyler		
	Areas of Critical Environmental Concern			
X	Botanical, including T&E Species	J. Green		
	Communications (Dispatch)			
X	Cultural Resources	S. Arnold		
X	Energy Policy	A. Curtis		
X	Environmental Justice	A. Curtis		
	Farm Lands (Prime or Unique)			
	Fire Management			
	Floodplain			
X	Hazardous Material	S. Fusilier		
X	Lands/Realty	S. Fusilier		
X	Land Law Examiner	C. Holzer		
	Law Enforcement			
	Minerals			
X	Native American Religious Concerns	S. Arnold		
X	Non-Native Invasive Species	J. Green		
	Operations			
X	Recreation	A. Curtis		
X	Soils	R. Oyler		
	Socioeconomic			
X	Standards for Rangeland Health	R. Oyler		
	Surface Protection			
X	Visual Resources	A. Curtis		
	Wastes, Hazardous or Solid			
	Water Rights			
	Water Quality, Drinking or Ground			
	Wetlands/Riparian Zones			
	Wild and Scenic Rivers			
	Wilderness			
	Wild Horses and Burros			
X	Wildlife including T&E Species	J. Green		

Prepared by: \_\_\_\_\_

Aaron Curtis  
Outdoor Recreation Planner

Date: \_\_\_\_\_

Reviewed by: \_\_\_\_\_

Karen Reichhardt  
Acting Planning and Environmental Coordinator

Date: \_\_\_\_\_

Reviewed by: \_\_\_\_\_

Karla Norris  
Assistant Field Manager, Recreation and Visitor Services

Date: \_\_\_\_\_



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## BUREAU OF LAND MANAGEMENT

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2555 East Gila Ridge Road  
Yuma, AZ 85365  
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### Environmental Assessment AZ-320-2005-002

#### Jester's Hiking Trail



Prepared by: Aaron Curtis  
January 11, 2005

## **CHAPTER 1: PURPOSE OF AND NEED FOR THE PROPOSED ACTION**

### **Introduction**

The Bureau of Land Management (BLM) Yuma Field Office (YFO) proposes to develop and maintain an existing hiking trail, known as Jester's Trail, in the Gila Mountains, Yuma County, Arizona. Jester's Trail is 2.3 miles long and climbs 1673 feet from the trailhead to an end point 1923 feet above mean sea level. Once legal public access to the project site has been established, improvements would also be made at the trailhead. Implementation of the proposed project would be carried out by BLM employees and volunteers and Yuma Trails, Inc. Yuma Trails is an Arizona non-profit corporation that has formally partnered with the YFO to preserve and promote community recreational trails for the use, enjoyment, and education of the general public in the greater Yuma area.

### **Need for the Proposed Action**

As a result of the rapid growth of Yuma, Arizona, the public lands in the surrounding area have experienced an incredible increase in recreational use. Unauthorized motorized and non-motorized route proliferation is now occurring throughout the Gila Mountains. This situation is causing increased rates of soil erosion and the destruction of native vegetation. The BLM estimates that an average of 250 visitors hike Jester's Trail each month (Aaron Curtis, BLM Outdoor Recreation Planner, personal communication). Many parts of the trail are in desperate need of maintenance, and can be very dangerous for inexperienced hikers. Obesity is now a major cause of death for Americans and there is an absence of developed recreational facilities on the public lands that provide Yumans with convenient opportunities to achieve health and fitness goals and quality of life benefits.

### **Management Objectives of the Proposed Action**

The development and maintenance of Jester's Trail would decrease the current rate of soil erosion along the trail, protect sensitive natural resources next to the trail, and provide new groups of visitors with the opportunity to safely experience their public lands.

### **Scope of this Environmental Analysis**

Yuma Trails, Inc. and the BLM held two public open houses in 2003 to obtain community feedback on the development of recreational trails in the greater Yuma area. The meetings were publicized through notices in the Yuma Daily Sun and letters and e-mails sent to parties on the YFO mailing list. The public has shown a great deal of support for the development of recreational trails in the Gila Mountains. Several governmental and non-governmental agencies and organizations have expressed interest in forming partnerships with Yuma Trails, Inc. and the BLM for the proposed action.

### **Land Use Plan Conformance**

The proposed action is in conformance with the *Yuma District Resource Management Plan (RMP)* and its *Record of Decision, as amended (February 1987)*. Even though hiking trails are not specifically provided for in the RMP, the project is clearly consistent with the Land Use Plan decision that the "BLM's principle objective would be to ensure

that adequate recreation opportunities are provided for a broad range of recreating publics” (Yuma District RMP, page 21). The YFO does not currently maintain any other mountain hiking trails. Implementation of the proposed action would, therefore, increase the range of recreational opportunities within the jurisdiction of the YFO.

### **Related EISs, EAs, and Other Relevant Documents**

- **The BLM’s Priorities for Recreation and Visitor Services:** BLM Workplan Fiscal Years 2003-2007, May 2003. Implementation of the proposed project would work towards achieving the following national BLM priorities:
  1. Identify and pursue rights-of-way agreements covering public access to the BLM public lands to improve recreation-related opportunities as well as enhance access for other management purposes (page 14).
  2. Continue to support education and outreach programs like *Tread Lightly!* and *Leave No Trace* to foster outdoor ethics and stewardship (page 15).
  3. Collaborate with other federal, state, and local governmental agencies as well as non-governmental organizations, individuals, and volunteers to identify partnerships for accomplishing trails-related activities (page 17).
  4. Support and collaborate with local governments and service providers in adjoining communities to produce recreational opportunities for visitors and local residents to achieve health and fitness goals and quality of life benefits from the public lands (page 18).
  5. Collaborate with all recreation and visitor service providers including federal, state, and local governmental agencies and private sector stakeholders including non-governmental organizations (page 20).
  6. Implement compatible resource, facility, and visitor management actions appropriate to the settings required to produce desired experiences and quality of life outcomes (page 20).
  7. Develop and improve signs at selected high priority areas (such as heavily-visited recreation areas) (page 21).
  8. Incorporate outdoor ethics and stewardship principles into interpretation and education media, resource use stipulations, brochures, maps, and similar print media (page 22).
  9. Develop collaborative projects with local communities and the tourism industry to protect, preserve, and restore important BLM public land attractions (page 29).
  10. Emphasize and expand BLM’s unique role in protecting the character, custom, and culture of the American west (page 29).

### **Applicable Regulatory Requirements and Required Coordination**

Coordination between the BLM YFO and the Arizona Game and Fish Department, Region VI Yuma Office took place for this project to avoid any potential adverse impacts to the Arizona bighorn sheep and mule deer populations in the Gila Mountains.

### **Issues Studied in Detail**

1. Public access to the project area.
2. Public safety on the existing hiking trail.
3. Impacts to cultural resources and Native American religious concerns.
4. Soil erosion occurring on the existing hiking trail.
5. Impacts to crytobiotic soils in the project area.

6. Impacts to the elephant trees (*Bursera microphylla*) in the project area.
7. Impacts to the bighorn sheep and mule deer in the project area.
8. Impacts to air quality from the proposed action.
9. Impacts to rangeland health from the proposed action.

#### **Issues Eliminated from Detailed Study**

- Areas of Critical Environmental Concern, Farm Lands (Prime or Unique), Floodplain, Hazardous or Solid Waste, Water Quality (Ground or Surface), Wetlands/Riparian Zones, Wild and Scenic Rivers, and Wilderness.

#### **Decisions That Must Be Made**

The BLM is primarily responsible for the balanced management of the public lands and resources and their various values so that they are considered in a combination that will best serve the needs of the American people. Management is based upon the principles of multiple use and sustained yield; a combination of uses that take into account the long-term needs of future generations for renewable and nonrenewable resources. These resources include recreation; range; timber; minerals; watershed; fish and wildlife; wilderness; and natural scenic, scientific, and cultural values. This environmental assessment will determine if the impacts to the project area's resources from the proposed action are allowable under the National Environmental Policy Act. This environmental assessment will also compare the impacts to the project area's resources from the proposed action to the impacts of these same resources if no management action is taken.

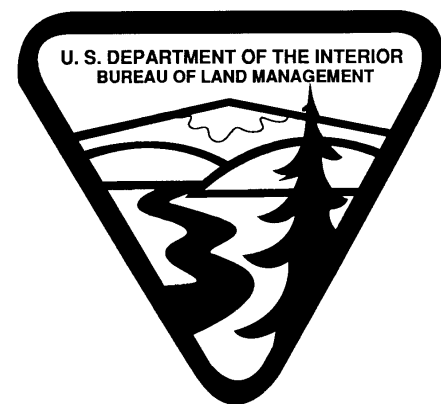
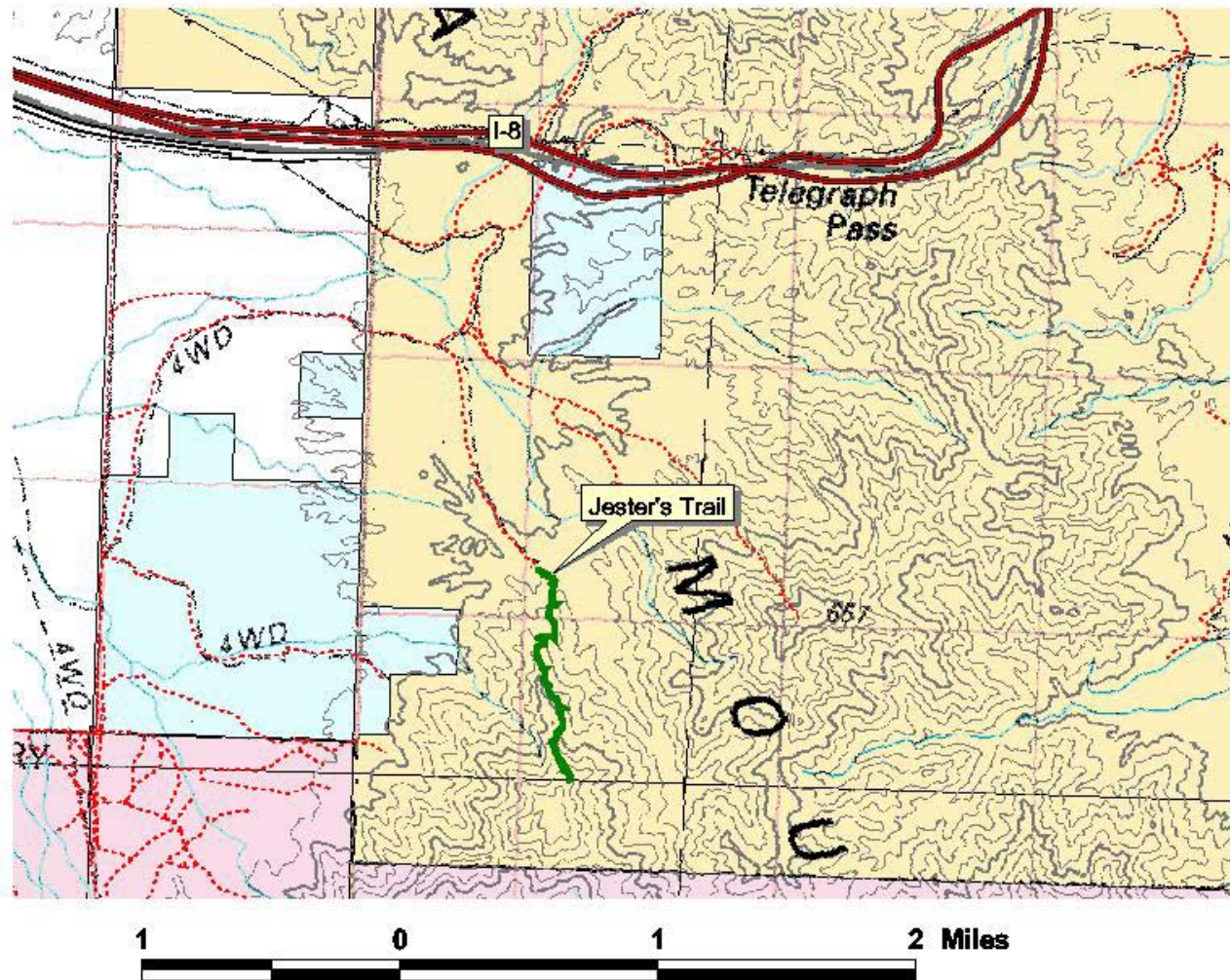
### **CHAPTER 2: ALTERNATIVES INCLUDING THE PROPOSED ACTION**

#### **Location**

Jester's Trail is located in sections 17 and 20, Township 9 South, Range 20 West, Gila and Salt River Base Meridian, Yuma County, Arizona (please see Map 1: Jester's Trail Project Area).



# Jester's Trail



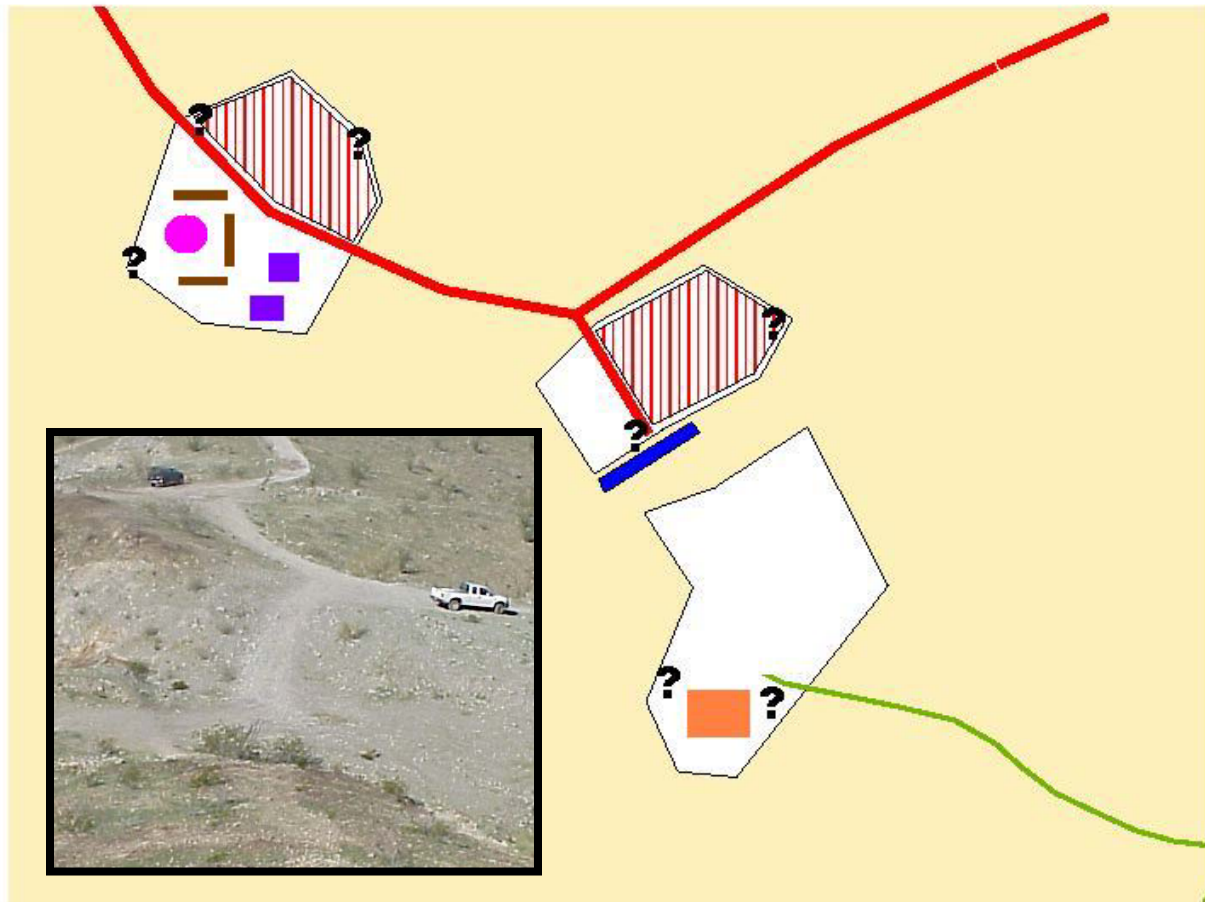
- Public
- State
- Private
- Military



### **Proposed Action Alternative**

**A. Proposed Actions at the Trailhead:** The proposed actions at the trailhead would not occur until legal public access for vehicles to the project site has been established. A 0.5 acre area at the base of the trail would be designated as the trailhead (please see Map 2: Proposed Trailhead Improvements). The area has been previously disturbed from past mining activity and very little vegetation is present. The 0.5 acres would be graded and leveled with a D25 bulldozer and a front-end loader. This action would take no more than four days. Benches, picnic tables, a fire pit, a shade structure, a post-and-cable vehicle barrier, a pedestrian traffic counter, and signs would all be installed within this area. Parking spots would also be designated at the trailhead. The proposed signs would be informational and interpretive. Informational signs would contain the rules, regulations, length, and difficulty of the trail. Interpretive signs would provide suggestions to the public on how to responsibly recreate on our public lands. *Leave No Trace* and *Tread Lightly!* materials would be used as much as possible. All proposed structures would be anchored into the bedrock or onto the bedrock with cement. Local materials would be used as much as possible for these various structures. The structures would be installed as funding, labor, and public access to the site become available.

# Proposed Trailhead Improvements



0.02 0 0.02 0.04 Miles

- |  |                    |  |                 |
|--|--------------------|--|-----------------|
|  | Trailhead Areas    |  | Jester's Trail  |
|  | Sign               |  | Shade Structure |
|  | Vehicle Barrier    |  | Fire Pit        |
|  | Designated Parking |  | Bench           |
|  | OHV Trail          |  | Picnic Table    |





**B. Proposed Actions along the Trail:** Because the public can legally access the project site on foot, proposed actions on the hiking trail would occur prior to the establishment of legal public access for vehicles. Small soil erosion control structures (e.g. rock waterbars, check dams, gabions, etc.) would be installed at various points along the trail where soil erosion is occurring from improper water drainage patterns. At other points the trail divides in two for small distances before converging once more into a single trail. The diverging trail that is the most sustainable would be kept, and the other trail would be restored to natural conditions. Three benches of local stone would be installed at three various points along the trail. These points are logical resting spots for hikers and provide beautiful vistas of the surrounding lands (please see Photos 1, 2, and 3). The final 150 vertical feet of the trail is extremely steep and dangerous. This area would undergo up to 600 feet of new trail construction. Soil erosion control structures and switchbacks would be installed on this new portion of trail to improve visitor safety and protect the project area's soils. Small signs marking the trail would be installed throughout its length. All proposed actions on the trail would be implemented with the use of hand tools, such as rock bars, pick axes, McClouds, rakes, etc. Tools and excavated rock would be transported up and down the trail with wheelbarrows and canvas rock carriers. Excavated rock would be placed along the trail, at the trailhead, or used to create one of the proposed structures. Vegetation growing onto the trail would be pruned with hand shears as needed. The trail would be continuously maintained and improved in this manner as needed to address public safety and natural resource protection concerns.



Photo 1: First overlook

Photo 2: Second overlook

Photo 3: Third overlook

**C. Stipulations for the Proposed Action:**

1. All equipment and tools would be washed prior to implementation with a high pressure water hose to decrease the risk of inadvertently spreading non-native invasive species into the project area.
2. No Elephant trees (*Bursera microphylla*) would be wholly removed as a part of any proposed action in this environmental assessment.
3. Damage to cryptobiotic soils within the project area would be kept to a minimum (please see Chapter 3: Description of the Affected Environment, Soils for a definition of "cryptobiotic soils"). Workers would be taught how to identify cryptobiotic soils before entering the project area.
4. No historic properties would be disturbed as a part of the proposed action. All workers would be briefed on cultural resource laws and regulations before entering the project area and would be required to follow cultural resource stipulations. Should any cultural and/or paleontological resources be

encountered during project ground-disturbing activities, work would cease in the area of the discovery and the BLM would be notified immediately. Work may not resume until written authorization to proceed is issued by the BLM.

5. Any Native American religious concerns shared with BLM during the consultation process would be addressed pursuant to applicable laws and regulations prior to project implementation.

### **No Action Alternative**

Under the No Action Alternative Jester's Trail and trailhead would not be developed and maintained.

### **Mitigation**

- The installation of soil erosion control structures would decrease the current rates of soil erosion occurring from existing visitor use on the trail.
- Damage to cryptobiotic soils, cultural and paleontological resources, and historical properties from implementation of the proposed action would be minimized by briefing all workers on stipulated best management practices prior to project implementation.
- Interpretive signs, such as *Leave No Trace* and *Tread Lightly!* materials, would provide visitors with guidelines for responsibly recreating on our public lands. These materials would educate visitors on how to easily reduce or avoid adverse impacts to the sensitive natural resources within the project area.
- Maintained trails serve to keep hikers on course and prevent disturbance in new areas.

## **CHAPTER 3: DESCRIPTION OF THE AFFECTED ENVIRONMENT**

### **Introduction**

This section describes the existing conditions of the environmental components that could be affected by the proposed action and no action alternative if implemented. It also serves as the baseline for the comparisons within Chapter 4: Environmental Impacts of the Proposed Action and No Action Alternative.

A review of the existing environment shows that the following list of critical elements of the human environment are not present or would not be affected by the proposed action; therefore, they will not be addressed in this EA: Areas of Critical Environmental Concern, Farm Lands (Prime or Unique), Floodplain, Hazardous or Solid Waste, Water Quality (Ground or Surface), Wetlands/Riparian Zones, Wild and Scenic Rivers, and Wilderness.

### **Description of Project Area**

#### **Air Quality**

The proposed trail is located along the extreme eastern edge of the Yuma PM<sub>10</sub> Nonattainment Area. In February 2004, the Arizona Department of Environmental Quality submitted a Natural Events Action Plan for the nonattainment area. This plan may eventually lead to the nonattainment area being reclassified as attainment in 2006.

### **Botanical, including Special Status and Threatened or Endangered Plant Species**

The project area is classified as Sonoran desert shrub. This vegetative community is dominated by shrubs in open stands, with a large amount of bare soil or desert pavement. The understory vegetation is sparse except when flushes of annuals are produced by seasonal precipitation. There are no known Special Status, Threatened, or Endangered plants within or near the project area. Please see the Appendix B for a list of plants found within the project area.

### **Cultural Resources**

Several Federal laws have been established to provide protection for cultural resources, including the Antiquities Act of 1906; the American Indian Religious Freedom Act of 1978; and the Archaeological Resources Protection Act of 1979. Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, requires Federal agencies to take into account the effect of Federal undertakings on any property that is included in or eligible for inclusion in the National Register of Historic Places (NRHP).

The Gila Mountains are primarily known for historic mining with several old mining trails and shafts visible around the project area. There are four prominent veins of quartz in the vicinity of the trail. The breakage of quartz from these veins is either natural or could be a result of historic mining activities. No prehistoric cultural resources have been previously recorded in the vicinity of the project area.

### **Energy Policy**

The project area contains no features related to energy development, production, supply, or distribution.

### **Environmental Justice**

Title VI of the Civil Rights Act of 1964 and related statutes ensure that individuals are not excluded from participation in, denied the benefit of, or subjected to discrimination under any program or activity receiving federal assistance on the basis of race, color, national origin, age, sex, or disability. Executive Order 12898 on Environmental Justice directs that programs, policies, and activities not have a disproportionately high and adverse human health and environmental effect on minority and low-income populations.

### **Fish and Wildlife, including Special Status, Threatened, or Endangered Animal Species**

Animal species present within the project area are typical of the Sonoran desert uplands. According to the Arizona Game and Fish Department's Heritage Database Management System, the project area contains suitable habitat for two Sensitive Species, the Rosy Boa and California leaf nosed bat. There are no known Special Status, Threatened, or Endangered animals found within the project area. Please see Appendix C for a list of animal species found within or near the project area.

### **Native American Religious Concerns**

Specific statutes, regulations, and executive orders guide consultation with Native American tribes to identify cultural resources important to tribes and to address tribal concerns about potential impacts to these resources. These include the National

Historic Preservation Act of 1966, as amended, the American Indian Religious Freedom Act of 1978, the Native American Graves Protection and Repatriation Act of 1990, Executive Order 13007 Indian Sacred Sites, and Executive Order 13175 Consultation and Coordination with Indian Tribal Governments.

In accordance with the abovementioned federal laws, BLM initiated consultation with 29 Native American tribes and groups with an interest in the Gila Mountains area on December 22, 2004. To date there are no known issues or concerns for this project.

### **Non-Native Invasive Species**

In accordance with Executive Order 13112, federal agencies will manage for invasive species. The proposed project area contains common invasive plants such as *Brassica tournefortii* (Sahara mustard) and *Schismus barbatus* (Common Mediterranean grass). These invasive plants are widespread throughout the desert southwest.

### **Recreation**

The Gila Mountains are a popular recreation destination for the greater Yuma, Arizona, area. There are several undeveloped hiking trails that go into the mountains and washes. Several designated and undesignated off-highway vehicle trails also exist throughout the foothills and washes of the mountain range. Geocaching and wildlife and wildflower viewing are also common recreational activities that occur here. The BLM estimates that approximately 250 people hike Jester's Trail per month. The Gila Mountains are classified as a "Roaded Natural" recreation area according to the BLM's Recreation Opportunity Spectrum. Roaded Natural recreation areas provide about equal opportunities for affiliation with other user groups and for isolation from the sights and sounds of humans. They also provide the opportunity to have a high degree of interaction with the natural environment. Challenge and risk opportunities are important for specific challenging activities. The practice of outdoor skills are important, and the opportunity for both motorized and non-motorized recreation are present within Roaded Natural areas.

### **Soils**

The soil unit is Laposa-Rock Outcrop. Approximately 55% of the project site is composed of gravel, with much of the surface covered by pebbles and cobbles. Rock outcroppings occupy the remaining 45% of the project site. Due to the steep slopes, there is rapid water runoff on the Laposa soils. Portions of the existing trail were improperly designed and laid out, which is creating improper water drainage patterns. Gullies and rills are beginning to form at several places along the existing trail, which is increasing the processes of erosion. Cryptobiotic soils are present within the project area. Cryptobiotic soils are living soil crusts composed of small plants such as soil lichens, mosses, green algae, microfungi, and bacteria. These knobby black crusts play an important role in the desert ecosystem by stabilizing sand deposits and forming primitive soil horizons.

### **Standards for Rangeland Health**

As an upland site, the project area is required to meet Standard 1 of the BLM Arizona Standards for Rangeland Health. In order to meet Standard 1, ground cover in the form of plants, litter, or rock should be present in pattern, kind and amount sufficient to

prevent accelerated erosion for the ecological site; and signs of accelerated erosion should be minimal or diminishing for the ecological site as determined by monitoring over an established period of time (BLM Arizona Standards for Rangeland Health, page 28). Evidence of increased soil erosion on the trail prevents the project area from currently meeting Standard 1 of Rangeland Health.

### **Visual Resources**

The Gila Mountains are highly visible part of the Yuma, Arizona, landscape. The mountain range can be seen from almost every part of the city on the eastern horizon. Visible structures in the mountains include Interstate 8 and the antennas at Yuma's primary communications site at Telegraph Pass. The BLM uses a process called the Visual Resource Management system to identify and manage scenic values on public lands. The YFO classifies the Gila Mountains as a Class II Visual Resource Management area (*Final Yuma District RMP*, page 65). Class II landscape management requires that changes in the basic elements (color, line, texture, and form) not be obvious or evident to the observer, and that changes should not measurably alter the landscape's original appearance.



## CHAPTER 4: ENVIRONMENTAL IMPACTS OF THE PROPOSED ACTION AND NO ACTION ALTERNATIVE

### Introduction

This chapter assesses potential environmental consequences associated with direct, indirect, and cumulative effects of the Proposed Action and No Action Alternatives.

### Air Quality

- A. Impacts of the Proposed Action:** Air quality would be temporarily impacted from fugitive dust emissions during construction phases of the trailhead. There would be no long-term cumulative impacts to air quality from implementation of the proposed action.
- B. Impacts of the No Action Alternative:** Under the no action alternative no construction would occur at the trailhead and there would be no impacts to air quality.

### Botanical, including Special Status, Threatened, or Endangered Plant Species

- A. Impacts of the Proposed Action:** Some initial damage to nearby vegetation would be anticipated during trail development phases from the inadvertent falling of rocks. Once trail development is complete, hikers would be provided with a clearly marked, safer, single trail that they would be less likely to deviate from. *Leave No Trace* and *Tread Lightly!* interpretive materials installed at the trailhead would stress the importance of staying on the trail and not disturbing the surrounding native vegetation. Branches of vegetation would be pruned as they grow onto the trail. Implementation of the proposed action would cause long-term beneficial impacts to the vegetation surrounding the trail.
- B. Impacts of the No Action Alternative:** Under the no action alternative Jester's Trail would not be developed. Dangerous and unnecessary portions of the trail would remain. This would encourage hikers to continue deviating from pre-disturbed areas and cause new vegetative disturbance. No interpretive materials would be installed at the trailhead to provide visitors with guidelines on responsible recreation. Long-term adverse impacts to vegetation would occur under the no action alternative.

### Cultural Resources

- A. Impacts of the Proposed Action:** A Class III cultural resources survey of the proposed Jester's Trail was completed by the BLM on November 17, 2004. No cultural resources eligible for inclusion on the NRHP would be affected from implementation of the proposed action. The proposed action would comply with all applicable laws and regulations, including Section 106 of the National Historic Preservation Act (NHPA) and regulations set forth in 36 Code of Federal Regulations (CFR) Part 800.
- B. Impacts of the No Action Alternative:** No cultural resources would be affected from implementation of the no action alternative.

### **Energy Policy**

- A. Impacts of the Proposed Action:** Since the project area contains no features related to energy development, production, supply, or distribution, implementation of the proposed action would not impact the President's Energy Policy.
- B. Impacts of the No Action Alternative:** The President's Energy Policy would not be impacted under the no action alternative.

### **Environmental Justice**

- A. Impacts of the Proposed Action:** Implementation of the proposed action would provide new user groups (i.e. inexperienced hikers) with a wider range of recreational opportunities on their public lands. The project would not have a disproportionately high and adverse human health and environmental effect on minority and low-income populations, and would conform to Executive Order 12898 on Environmental Justice.
- B. Impacts of the No Action Alternative:** Under the no action alternative, new user groups would not be provided with a wider range of recreational opportunities on their public lands. Implementation of the no action alternative would not have a disproportionately high and adverse human health and environmental effect on minority and low-income populations, and would conform to Executive Order 12898 on Environmental Justice.

### **Fish and Wildlife, including Special Status, Threatened, or Endangered Animal Species**

- A. Impacts of the Proposed Action:** Wildlife may be temporarily disturbed during implementation phases of the proposed action. The heavy equipment necessary for construction of the trailhead would cause the most amount of noise, but would occur for no more than three days. *Leave No Trace* and *Tread Lightly!* interpretive materials installed at the trailhead would stress the importance of staying on the trail and not disturbing the surrounding wildlife habitat. Implementation of the proposed action would not cause any long-term adverse impacts to wildlife.
- B. Impacts of the No Action Alternative:** Under the no action alternative, no interpretive materials would be installed at the trailhead. The absence of these materials would not prevent hikers from inadvertently disturbing the surrounding wildlife habitat. If the no action alternative is implemented, there would be no change in the impacts to wildlife from recreation at the project area.

### **Native American Religious Concerns**

- A. Impacts of the Proposed Action:** At this time there are no known Native American religious concerns for the project area. Government-to-government consultation for this project was initiated with 29 Native American tribes and groups on December 22, 2004. Any concerns shared with BLM during the consultation process would be addressed pursuant to applicable laws and regulations prior to project implementation.

- B. Impacts of the No Action Alternative:** Implementation of the no action alternative would not impact any Native American religious concerns.

### **Non-Native Invasive Species**

- A. Impacts of the Proposed Action:** The proposed action is unlikely to impact non-native invasive species. Seed could be spread into new areas due to pedestrian traffic. Mitigation measures such as cleaning equipment prior to entering the site would decrease the probability of introducing new invasive species to the project area.
- B. Impacts of the No Action Alternative:** The no action alternative would not impact non-native invasive species.

### **Recreation**

- A. Impacts of the Proposed Action:** The proposed trail improvements would greatly improve visitor safety, which would allow less experienced hikers to use the trail. This would create a recreational opportunity for local Yuma residents to achieve health and fitness goals and quality of life benefits from their public lands. The proposed installation of interpretive signs, such as *Leave No Trace* and *Tread Lightly!* materials, would provide visitors with guidelines on how to responsibly recreate on their public lands. The proposed action would not change the Gila Mountains' classification as a Roaded Natural area in the BLM's Recreation Opportunity Spectrum. Implementation of the proposed action would cause long-term beneficial impacts to recreation at Jester's Trail.
- B. Impacts of the No Action Alternative:** Under the no action alternative Jester's Trail would not be improved, and public safety concerns would not be addressed. Without addressing public safety concerns, the trail would not provide a viable opportunity for local Yuma residents to achieve health and fitness goals and quality of life benefits from their public lands. The continued absence of interpretive signs would not provide visitors with guidelines on how to responsibly recreate on their public lands and natural resource degradation of the project site would continue. The no action alternative would not change the Gila Mountains' classification as a Roaded Natural area in the BLM's Recreation Opportunity Spectrum. Implementation of the no action alternative would not benefit recreation at Jester's Trail.

### **Soils**

- A. Impacts of the Proposed Action:** Soil erosion control structures would be installed along the trail as a part of the proposed action. These structures would address the accelerated soil erosion rates occurring on the trail from improper water drainage patterns. Some incidental damage to cryptobiotic soils within the project area would occur from implementing the proposed action. As desired future conditions are achieved, implementation of the proposed action would benefit soils within the project area.
- B. Impacts of the No Action Alternative:** Under the no action alternative, no soil erosion control structures would be installed on the trail, and accelerated rates of

erosion within the project area would continue. Incidental damage to the cryptobiotic soils within the project area would not occur from the implementing the proposed action, but these soils would be more susceptible to damage from the increased soil erosion occurring from the improper water drainage patterns along the trail.

#### **Standards for Rangeland Health**

**A. Impacts of the Proposed Action:** Soil erosion control structures would be installed along the trail as a part of the proposed action. This would maintain and promote ground cover that would provide for infiltration, permeability, soil moisture storage, and soil stability appropriate for the upland project site. As desired future conditions are achieved, Jester's Trail would meet Standard 1 for Rangeland Health.

**B. Impacts of the No Action Alternative:** Under the no action alternative, no soil erosion control structures would be installed on the trail, and accelerated rates of erosion within the project area would continue. Jester's Trail would continue not to meet Standard 1 for Rangeland Health if the no action alternative is implemented.

#### **Visual Resources**

**A. Impacts of the Proposed Action:** The proposed action would not make any changes in the basic elements of the area that would be obvious or evident to the observer, nor would it measurably alter the landscape's original appearance. None of the proposed structures would be visible from the city of Yuma or Interstate 8. The proposed action would not affect the Gila Mountains' classification as a Class II landscape management area.

**B. Impacts of the No Action Alternative:** No facilities would be installed at Jester's Trail and there would be no impacts to visual resources from the no action alternative.

## CHAPTER 5: LIST OF AGENCIES AND PERSONS CONSULTED

### List of Preparers

<u>Specialist Name</u>	<u>Title, Organization</u>
Sandra Arnold	Archeologist, BLM
Aaron Curtis	Outdoor Recreation Planner, BLM
Russ Engel	Habitat Program Manager, Arizona Game & Fish Dept
Stephen Fusilier	Team Lead for Lands and Minerals, BLM
Jennifer Green	Natural Resource Specialist, BLM
Candy Holzer	Land Law Examiner, BLM
Kim Klementowski	Natural Resource Specialist, BLM
Bill Knowles	Habitat Specialist, Arizona Game & Fish Dept
Lester Olin	Volunteer, Yuma Trails, Inc.
Roger Oyler	Rangeland Health Specialist, BLM
Winfred Wong	Wildlife Biologist, BLM

## CHAPTER 6: APPENDICES

### Appendix A: References

1. Final Yuma District Resource Management Plan, Environmental Impact Statement, and it's Record of Decision, as amended (February 1987).
2. The BLM's Priorities for Recreation and Visitor Services, BLM Workplan Fiscal Years 2003-2007, May 2003.
3. Statewide Plan Amendment of Land Use Plans in Arizona for Implementation of Arizona Standards for Rangeland Health and Guidelines for Grazing Administration, BLM Arizona State Office, December 1996.
4. Visual Contrast Rating Worksheet for Jester's Trail, BLM Form 8400-4, December 2004.
5. BLM Plant Inventory of Jester's Trail, October 2004/January 2005.
6. BLM Wildlife Inventory of Jester's Trail, October 2004.
7. BLM Cultural Resources Survey Report of Jester's Trail, December 2004.

### Appendix B: BLM Plant Inventory of Jester's Trail

Arizona lupine ( <i>Lupinus arizonicus</i> )	Desert rue ( <i>Thamnosia Montana</i> )	Parry's lip fern ( <i>Cheilanthes parryi</i> )
Barrel cactus ( <i>Ferocactus species</i> )	Devil's spineflower ( <i>Chorizanthe rigida</i> )	Pincushion cactus ( <i>Mammillaria tetrancistra</i> )
Beavertail cactus ( <i>Opuntia basilaris</i> )	Elephant tree ( <i>Bursera microphylla</i> )	Ratany ( <i>Krameria species</i> )
Blond plantain ( <i>Plantago ovata</i> )	Fagonbush ( <i>Fagonia species</i> )	Saguaro ( <i>Canegiea gigantean</i> )
Brittlebush ( <i>Encelia farinose</i> )	Flat-crown wild buckwheat ( <i>Erigonum deflexum</i> )	Sahara mustard ( <i>Brassica tournefortii</i> )
Buckhorn cholla ( <i>Opuntia acanthocarpa</i> )	Ghostflower ( <i>Mohavea confertiflora</i> )	Sweet bush ( <i>Bebbia juncea</i> )

Common Mediterranean grass ( <i>Schismus barbatus</i> )	Globe mallow ( <i>Sphaeralcea</i> species)	Teddybear cholla ( <i>Opuntia bigelovii</i> )
Creosote bush ( <i>Larrea tridentate</i> )	Indian-pipeweed ( <i>Erigonum inflatum</i> )	White bursage ( <i>Ambrosia dumosa</i> )
Desert agave ( <i>Agave deserti</i> )	Longleaf jointfir ( <i>Ephedra trifurca</i> )	Yellow paloverde ( <i>Cercidium microphyllum</i> )
Desert lavender ( <i>Hyptis emoryi</i> )	Ocotillo ( <i>Fouquieria splendens</i> )	

Compiled by J. Green and W. Wong on 10/14/2004 and K. Klementowski on 01/06/2005.

### **Appendix C: BLM Animal Inventory of Jester's Trail**

Big horn sheep ( <i>Ovis canadensis</i> )	Desert rosy boa ( <i>Lichanura trivirgata</i> )	Sonoran desert tortoise ( <i>Gopherus agassizii</i> )
California leaf-nosed bat ( <i>Macrotus californicus</i> )	Gila monster ( <i>Heloderma suspectum</i> )	
Chuckwalla ( <i>Sauromalus obesus</i> )	Rock wren ( <i>Salpinctes obsoletus</i> )	

Compiled by J. Green and W. Wong, 10/14/2004.